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Civil Air Patrol Seeks To Enlist 280,000 Persons

A Civil Air Patrol to enlist for the duration of the war approximately 90,000 licensed pilots, 90,000 student pilots who will be licensed by spring, and a ground personnel estimated at 100,000 has been established by Mayor F. H. LaGuardia, director of the Office of Civilian Defense.

The Civil Air Patrol will include about 23,000 civil aircraft and 2,000 airports in the United States on which there are no military or scheduled airplane operations, hangars, shops, etc.

Director LaGuardia said it is the object of the Civil Air Patrol to enlist, train, and discipline civil aviation personnel and material so that their potential value to defense may be made available immediately. The potential value would be enhanced by the voluntary completion of training courses provided by national headquarters of the Civil Air Patrol with the cooperation of the Army and Naval Air Services and the Civil Aeronautics Administration.

General Curry Commander

Maj. Gen. John F. Curry, United States Army Air Corps, has been assigned by the Army to the Office of Civilian Defense and designated by Director LaGuardia as national commander of the Civil Air Patrol. Wing commanders in each of the 48 States have been named to enroll licensed civilian pilots of both sexes in the patrol. These commanders conferred with General Curry in Washington and received final detailed instructions concerning

their organization. Following is a list of the wing commanders and the States served:

Alabama, Birmingham, Harold F. Wood; *Arizona*, Phoenix, Carl C. Knier; *Arkansas*, Little Rock, Gilbert Leigh; *California*, Los Angeles, Bertrand Rhine; *Colorado*, Denver, Maj. W. W. Agnew; *Connecticut*, Newington, Thomas H. Lockhart; *Delaware*, Wilmington, Holger Horrlis; *Florida*, West Palm Beach, Maj. Wright Vermilya, Jr.; *Georgia*, Atlanta, Winship Nunnally; *Idaho*, Boise, A. A. Bennett; *Illinois*, Evanston, Jack Vilas, Sr.; *Indiana*, Indianapolis, Walker W. Winslow; *Iowa*, Cedar Rapids, Lt. Col. Daniel F. Hunter; *Kansas*, Anthony, J. Howard Wilcox; *Kentucky*, Louisville, Albert H. Near; *Louisiana*, New Orleans, Byron A. Armstrong;

Maine, Portland, Guy P. Gannett; *Maryland*, Rockville, Arthur C. Hyde; *Massachusetts*, South Hamilton, Gordon Chickering Prince; *Michigan*, Lansing, S. B. Steers; *Minnesota*, Minneapolis, Maj. Leslie L. Schroeder; *Mississippi*, Jackson, Mitchell Robinson; *Missouri*, St. Louis, Maj. William B. Robertson; *Montana*, Billings, Herman H. Henrickson; *Nebraska*, Lincoln, I. V. Packard; *Nevada*, Reno, E. J. Questa; *New Hampshire*, Concord, Russell Hillard; *New Jersey*, Summit, George A. Viehmann; *New Mexico*, Santa Fe, Harlee Townsend, Jr.; *New York*, Garden City, L. I., Beckwith C. Havens; *North Carolina*, Asheville, Mark Reed; *North Dakota*, Wahpeton, Arthur M. Sampson;

Ohio, Cleveland, Earle L. Johnson; *Oklahoma*, Oklahoma City, Moss Patterson; *Oregon*, Portland, Capt. Leo G. Devaney; *Pennsylvania*, Hummelston, William L. Anderson; *Rhode Island*, Hillsgrove, Willard M. Fletcher; *South Carolina*, Columbia, Dexter C. Martin; *South Dakota*, Pierre, T. B. Roberts, Jr.;

(See AIR PATROL, page 19)

First Group Here In Latin American Training Program

The first contingent of Latin American youths to be given aviation training in the United States under the Inter-American goodwill program has arrived in New York. Members of the group were immediately sent to three civilian aviation schools in Newark, N. J., Miami, Fla., and Glendale, Calif.

Under the program, which involves seven Federal agencies, Latin American young men are awarded scholarships for training in the United States as pilots, administrative aeronautical engineers, instructor mechanics, and airplane service mechanics. To date, over 400 have been selected. A total of 526 will be in training by May, according to present plans.

The first group to arrive here was met by Charles I. Stanton, Deputy Administrator of Civil Aeronautics, and also a director of the program; Earl R. Southee, Chief of the Standards Division of the C. A. A.'s Civilian Pilot Training Service; John S. Parker, Jr., Coordinator of the Latin American aviation training program; and Percy deF. Warner, Assistant Chief of the Ground School Section of the C. P. T.

Among the arrivals in the first group was William Rivas, son of the head of the Nicaragua Air Force.

"All of the Nicaraguan boys in the group come here with the idea of studying aviation to help protect our country and the Americas," young Rivas said.

Others to be trained under the program will arrive here and be assigned to schools in the very near future.

(See LATIN AMERICAN, page 28)



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CONTENTS

	Page
First group here in Latin American training program.....	17
Civil Air Patrol seeks to enlist 280,000 persons.....	17
Train older persons, C. A. A. officers urged.....	18
Mason leaves C. A. B. to take defense post.....	18
Toward safer flight.....	18
PRIVATE FLYING	
Glider certification explained in release.....	19
November accident report lists nine fatal mishaps.....	19
Plane owners cautioned.....	18
Summary of active certificates.....	19
AIR TRANSPORTATION	
C. A. A. releases plane loading data.....	20
Board considers CAA amendments.....	20
C. A. B. adopts new part to Civil Air Regulations.....	20
Domestic air carrier traffic statistics for 1939, 1940, and the first 11 months of 1941.....	21
AIRWAYS AND AIRPORTS	
Landing facilities in 1941 show gain; 190 airports, seaplane bases added.....	22
Airport projects approved.....	23
15 airports to finish training programs.....	23
Airports of entry, as of January 1, 1942.....	23
Air navigation facilities.....	23
MANUFACTURING and PRODUCTION	
SPAB approval speeds aviation gas program.....	24
Bomber from parts made by auto firms ahead of schedule.....	24
Chapter XIX revision is issued by C. A. A. New type approvals.....	22
New plant to produce self-sealing fuel tanks.....	24
OFFICIAL ACTIONS	
Orders.....	25
C. A. B. Opinions.....	26
Regulations.....	26
AIR SAFETY	
Icing conditions create hazard at lower levels.....	28
Individual accident reports.....	28

Air Share of Defense Dollar

According to an analysis of defense spending compiled by the Office for Emergency Management, 17 cents out of every defense dollar goes toward the construction of airplanes, engines and parts.

Train Older Persons, CAA Officers Urged

Civil Aeronautics Administration field executives have been urged to train older men and women as replacements for draft-age personnel which may be called to the colors, in a statement by Brig. Gen. Donald H. Connolly, C. A. A. Administrator.

"Deferment will not be requested for any man whose present position is not absolutely required in connection with our service to the armed forces," General Connolly said.

The new C. A. A. personnel policy as defined by General Connolly also stated that "no person shall be selected for employment in the C. A. A. who is eligible for military service in accordance with standards prescribed by Selective Service regulations for class I-A, except for temporary emergencies."

General Connolly urged all executives and supervisors to prepare standby personnel in order that class I-A C. A. A. workers "may be available immediately upon call."

"Special consideration shall be given to the maximum utilization of the capabilities of employees in order that operations may be carried on during the war with the least possible disruption," General Connolly said.

- Keep 'Em Flying -

Mason Leaves C. A. B. To Take Defense Post

G. Grant Mason, Jr., whose 3-year term as a member of the Civil Aeronautics Board expired on December 31, has been appointed consultant with the Defense Supplies Corporation.

Mr. Mason will devote his whole time to the Division of American Republics Aviation.

Appointed by the President as a member of the original Civil Aeronautics Authority, Mr. Mason took office on August 8, 1938. With a background of 11 years of airline experience in Latin America and surveys of civil aviation in Europe, he acted as chairman of a special interdepartmental committee on the Development of Aviation in the Western Hemisphere. The recommendations of the Committee were approved in 1939 and now are being carried out by the Defense Supplies Corporation.

Among other activities, Mr. Mason has represented the Civil Aeronautics Board on the Interdepartmental Committee on Cooperation with the American Republics and has been a member of the Committee on Technical Aviation Training for Citizens of Latin American Republics.

10,000th Light Plane

A manufacturer of light airplanes has reported production of his 10,000th aircraft.



The Standardization Center at Houston, Tex., established a year ago, serves to standardize inspection and instruction procedure used by field personnel of the Civil Aeronautics Administration.

Flight and maintenance supervisors of Civilian Pilot Training and inspectors from Safety Regulation receive instruction in training and maintenance procedures. This contributes to safety in two ways. First, it insures the maintenance of a well-trained, well-informed field force, whose familiarity with safety regulations will be thorough and whose interpretation of them will be uniform. Second, it insures the use of the same standardized technique throughout the Nation in the application of safety measures. Such uniformity in procedure also results in simplification of work, efficiency, and speed.

Further, the training courses given at the Center help to acquaint these men with the latest developments in aviation, many of which are designed chiefly to increase safety, and to refresh them on certain techniques of flying testing or maintenance.

The Center has been organized to include two main divisions—the Flight Branch and the Technical and Ground Branch. The Flight Branch handles Basic Flight Training, Advanced Flight Training, and Instrument Flight Training. The Technical and Ground Branch handles training in the Aircraft Laboratory, Powerplant Laboratory, Ground School Laboratory, and Procedure Laboratory.

Establishment of the Center has brought together all regular standardization equipment of the C. A. A. in the fields of pilot training, instrument flight, and air transport flying. Twenty-two aircraft are stationed at the Center, and five Link trainers are being used in the instrument training courses.

Plane Owners Cautioned

The Administrator of Civil Aeronautics has advised owners of private aircraft that they should render their aircraft inoperative while not in use by the removal of essential mechanism, unless such aircraft is stored or staked out under 24-hour guard. C. A. A. inspectors have been instructed to contact local police authorities and urge that they use whatever police powers they possess to compel private owners to take such precautionary action.

Air Patrol

(Continued from page 17)

Tennessee, Nashville, Lt. Col. Herbert Fox; Texas, Dallas, D. Harold Byrd; Utah, Salt Lake City, Joseph Bergin; Vermont, Burlington, Frederick W. Shephardson; Virginia, Richmond, Allan C. Perkinson; Washington, Spokane, Philip H. Hinkley; West Virginia, Charleston, David M. Giltinan; Wisconsin, Waukesha, Seth W. Pollard; Wyoming, Cheyenne, Dillard Walker.

Pamphlet Issued

A comprehensive pamphlet which includes application blanks and requirements has been mailed to all 48 Governors, to State aviation authorities, to field officers of the C. A. A., and to airport managers throughout the United States.

General Curry was promoted to the rank of major general October 27, 1940, and assigned to command the Northwestern Air District with headquarters at Spokane, Wash. He previously had been assigned to command the Tenth Pursuit Wing at Hamilton Field.

General Curry's affiliation with Army aviation dates back to August 1915 when, as a first lieutenant of the Fifteenth Infantry, he was attached to the Aviation Section, Signal Corps, at San Diego, Calif. He was born in New York City, April 22, 1886, and graduated from the United States Military Academy February 14, 1908. During the first World War, General Curry served overseas as Chief of Staff, Army Air Service, Second Army, at Toul, France. He saw service both as pilot and as observer and was credited with the destruction of one enemy observation balloon.

Landis Named Aide

Another appointment made by Director LaGuardia was that of Maj. Reed G.

Summary of Active Certificates

(As of January 1)

	1941	1942
Pilot certificates of competency...	65,000	100,787
Air line transport certificates of competency.....	1,393	1,587
Student-pilot certificates.....	87,806	96,731
Glider-pilot certificates of competency.....	138	164
Student glider-pilot certificates.....	516	514
Mechanic certificates of competency.....	11,177	14,047
Parachute-rigger certificates of competency.....	444	618
Certificated aircraft.....	17,000	24,836
Certificated gliders.....	39	65
Ground-instructors certificates of competency.....	1,948	4,815
Air-traffic control-tower operators certificates of competency.....	248	498
Aircraft dispatchers certificates of competency.....	357	420



Landis, former pilot, United States Army Air Service, as Aviation Aide to the Director of Civilian Defense. Major Landis saw service in the Cavalry on the Mexican border in 1916. In 1917 as a member of the United States Army Air Service, he was sent to England for training and attached to the Royal Flying Corps. He saw service in France as a pilot in the Fortieth Squadron, Royal Air Force, and received the British Distinguished Flying Cross. In September 1918 Major Landis was placed in command of the Twenty-fifth Aero Squadron, A. E. F. He was awarded the United States Distinguished Service Cross.

Major Landis has been a member of the Chicago Aero Commission since its inception; a member of the National Advisory Board of the National Aeronautics Association and was instrumental in organizing the National Airport Transport, Inc., and the Trans-Continental Air Transport, Inc. He was also instrumental in organizing the National Association of State Aviation Officials, of which he was president.

November Accident Report Lists Nine Fatal Mishaps

Nine fatal accidents in non-air-carrier flying were reported to the Safety Board for the month of November 1941, the Civil Aeronautics Board has announced.

Flagrant violations of the Civil Air Regulations again were responsible for most of the deaths.

Three of the accidents are cited below.

- (1) A student pilot flying low over a friend's house at 200 feet alti-

Glider Certification Explained in Release

Safety Regulation Release No. 82, explaining the procedure for obtaining glider airworthiness certificates, has been issued by the Civil Aeronautics Administration. A copy may be obtained from the Publications and Statistics Division, Civil Aeronautics Administration, Washington, D. C.

The procedure outlined in the release was established to enable present owners of uncertificated gliders to continue to operate them without unreasonable delay. The release quotes Amendment No. 135 to the Civil Air Regulations, which requires airworthiness certificates for all aircraft before they may be flown anywhere in the United States.

This release pertains only to the certification of gliders, since the CAR at present do not contain regulations applicable to the certification of gliders. A proposed Part 05 of the CAR was prepared in May 1940 and circulated to interested parties with Certificate and Inspection Release No. 12.

tude, opened the door of the plane and waved to his friend. The plane then stalled and spun in.

- (2) A pilot, while diving at a train, collided with high-tension wires bordering the tracks. The pilot and two passengers were killed.
- (3) A student pilot, carrying a passenger, spun in from a low altitude.

The table below compares fatal accidents in October and November 1940 and 1941:

	Non-air carrier			Scheduled air carrier		Total
	CPT graduates	CPT	Non-CPT	Domestic	Foreign	
November 1941.....	1	1	7			9
November 1940.....		3	9	1		13
October 1941.....	1	1	13	2	1	18
October 1940.....		2	21			23

The following table shows causes of November accidents:

	Kind of flying				
	Instructional	Pleasure	Commercial	Awaiting details	Total
Spin-stall.....		2			2
Collision (other objects).....		2			2
Under investigation.....				5	5
Total.....		4		5	9



Board Considers CAR Amendments

The Civil Aeronautics Board has under consideration two amendments to the Civil Air Regulations which are being circulated to interested persons with a request for comment as to the desirability or undesirability of adoption.

One of the amendments, contained in Civil Air Regulations Draft Release No. 7, would require a person operating an aircraft on or taking off from a landing area where a certified air-traffic control-tower operator is on duty to obtain a clearance for such operation. It also would require a person landing at a landing area or flying within a control zone to comply with the directions issued by a certified air-traffic control-tower operator controlling air traffic within such area. The text of the proposed regulation follows:

Effective -----, Part 60 of the Civil Air Regulations is amended by the addition of the following:

"60.3306. (a) No person shall operate an aircraft on or take off from a landing area at which a certified air-traffic control-tower operator is on duty controlling air traffic until such person obtains clearance for such operation from such control-tower operator, and (b) no person shall land aircraft at a landing area at which a certified air-traffic control-tower operator is on duty controlling air traffic contrary to the directions issued by such control-tower operator."

"60.3307. No person shall operate aircraft within a control zone contrary to such air-traffic directions for the prevention of collisions between aircraft and between aircraft and land or water vehicles as may be issued by a certified air-traffic control-tower operator on duty at the control airport of such zone."

Pilots' Compartment Rules

The other amendment, contained in Civil Air Regulations Draft Release No. 8, would render the following additional persons eligible for admission to the pilots' compartment during scheduled flight without a seat being available in the passenger compartment: (1) Flight supervisory personnel of the air carrier concerned who are certificated pilots; (2) first or second pilots in the Operations Specifications-Airmen of the air carrier concerned or another air carrier who have been authorized by the air carrier concerned and the Administrator to make the trip; (3) certificated aircraft dispatchers of the air carrier concerned or of another air carrier who have been authorized by the

air carrier concerned and the Administrator to make the trip; and (4) certificated mechanics of the air carrier concerned in the performance of duty. The text of the proposed amendment follows:

Effective -----, Part 61 of the Civil Air Regulations is amended as follows:

1. By striking paragraph (c) of section 61.7803 and substituting in lieu thereof the following:

"(c) Unless a seat is also available for his use in the passenger compartment, no person shall be admitted to the pilots' compartment during scheduled flight except:

"(1) A member of the flight crew;

"(2) A person engaged during flight in checking of pilots' operations for the Federal Government or for the air carrier;

"(3) Flight supervisory personnel of the air carrier concerned who are certificated pilots;

"(4) First or second pilots listed in Operations Specifications of the air carrier concerned or any first or second pilots listed in the Operations Specifications-Airmen of another air carrier who have been authorized by the air carrier concerned and the Administrator to make the trips over the route being flown for the purpose of route qualification or familiarization;

"(5) Certificated aircraft dispatchers of the air carrier concerned or certificated aircraft dispatchers of another air carrier who have been authorized by the air carrier concerned and the Administrator to make the trips over the route being flown for the purpose of establishing or maintaining dispatcher route qualification; or

"(6) Certificated mechanics of the air carrier concerned, in the performance of duty."

C. A. A. Releases Plane Loading Data

The Civil Aeronautics Administration has prepared a release which consolidates all outstanding C. A. A. publications on the subject of weight control and loading instructions, particularly with regard to air-carrier type aircraft. Copies of the release (Safety Regulation Release No. 80) can be obtained from the Publications and Statistics Division, Civil Aeronautics Administration, Washington, D. C.

Although the policies and procedures outlined in the release have been generalized to a great extent, it is anticipated that revisions will be necessary from time to time in order to take cog-

SUMMARY

Domestic airlines flew 106,617,851 revenue passenger-miles in November 1941, an increase of 31.02 percent over the figure for the corresponding month of 1940, according to statistics compiled by the Civil Aeronautics Administration.

The number of revenue passengers carried by the airlines in November was 301,878, or 37.34 percent more than in November 1940. The number of revenue miles flown in November 1941 was 11,500,667, a 20.13 percent gain over the number flown in November 1940.

The express pound-miles flown rose 38.63 percent to a total of 934,640,844 in November 1941. The revenue passenger load factor was 53.26 percent in November 1941, as against 50.09 percent in November 1940.

- Keep 'Em Flying -

C. A. B. Adopts New Part to Civil Air Regulations

The Civil Aeronautics Board has adopted, effective January 15, 1942, a new Part of the Civil Air Regulations, PART 66—FOREIGN AIR CARRIER REGULATIONS. The full text of the new Part is carried on page 26 of this issue.

The regulations set up in Part 66 apply to scheduled operations within the United States (not including the Philippines) by aircraft of a foreign air carrier holding a permit issued by the Board, pursuant to the provisions of section 402 of the Civil Aeronautics Act of 1938.

Subjects covered include Application of Air-Traffic Rules; Requirement of Pilot Certificate; Provision for Demonstration of Ability; Requirement of Aircraft Airworthiness; Inspection, Control of Traffic at Terminal Airports; Requirement of Operation Specifications; and Operation in Accordance with Operation Specifications. Part 66 was adopted by the Board as Amendment 66-O of the CAR.

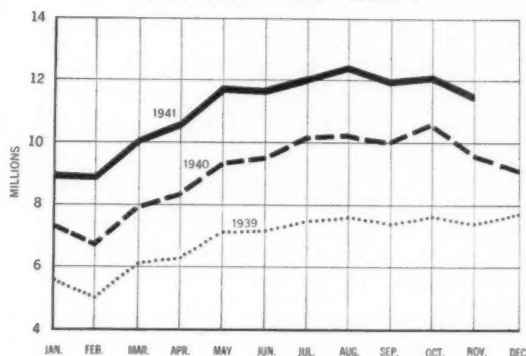
nizance of progress in aircraft design and within the aircraft industry itself, the C. A. A. said.

"Practices outlined herein which are not mandatory are recommended as acceptable solutions to the various problems associated with the subject of weight control," the release continued. "It should be understood that deviations from any of the practices recommended herein will be accepted if it can be demonstrated to the satisfaction of the Administrator that airworthiness considerations are adequately fulfilled."

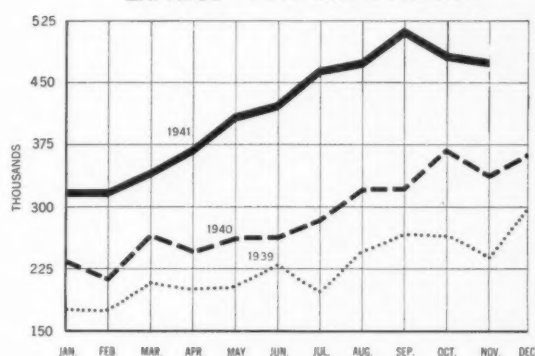
Subjects covered in the release include Manufacturer's Responsibility; Operator's Responsibility; and Weight Control Procedures. Each of these main divisions is divided into appropriate subsections for purposes of further discussion.

Domestic Air Carrier Traffic Statistics for 1939, 1940, and the First 11 Months of 1941

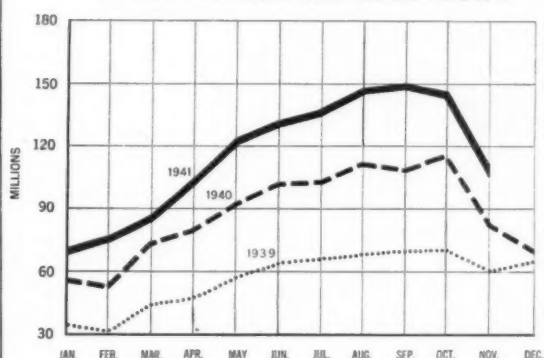
REVENUE MILES FLOWN



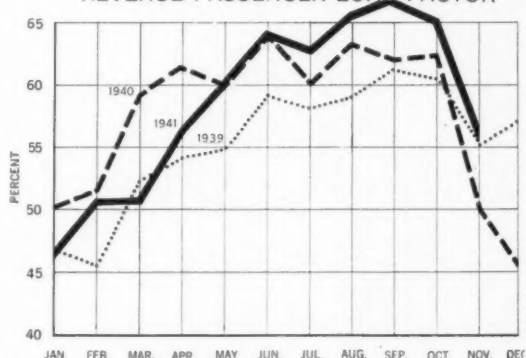
EXPRESS TON-MILES FLOWN



REVENUE PASSENGER-MILES FLOWN



REVENUE PASSENGER LOAD FACTOR



Domestic Air Carrier Traffic Statistics for November 1941

Operator	Revenue miles flown		Revenue passengers carried		Revenue passenger-miles flown		Express pound-miles flown		Revenue passenger load factor (percent)	
	November 1941	Percent change over 1940	November 1941	Percent change over 1940	November 1941	Percent change over 1940	November 1941	Percent change over 1940	November 1941	November 1940
All American Aviation, Inc.	62,986		0		0		343,745			
American Airlines, Inc.	2,728,196	12.11	99,632	33.77	33,085,502	28.67	235,466,416	20.47	64.10	59.14
Brant Airways, Inc.	511,343	21.82	13,086	28.86	3,839,951	27.93	23,264,126	57.26		42.80
Catalina Air Transport, Inc.	3,780	-20.57	769	-90	23,070	-90	370,770	6.20	54.62	53.22
Chicago & Southern Air Lines, Inc.	209,830	25.09	5,236	41.13	1,941,663	36.60	10,567,914	38.33	44.94	42.35
Continental Air Lines, Inc.	150,784	42.03	1,447	42.14	430,091	33.72	1,239,638	57.12	28.37	30.29
Delta Air Corporation	259,332	42.89	7,633	73.99	2,079,392	90.07	5,183,642	100.51	47.84	50.16
Eastern Air Lines, Inc.	1,723,860	15.29	46,812	37.33	17,002,941	25.47	107,328,243	37.19	50.14	48.25
Inland Air Lines, Inc.	115,448	31.92	804	.50	207,976	5.74	430,239	22.52	18.01	22.48
Mid-Continent Airlines, Inc.	186,948	10.85	2,408	13.96	606,979	11.17	1,756,519	65.62	29.39	25.93
National Airlines, Inc.	131,713	35.36	2,901	45.78	787,060	76.02	1,360,935	21.74	45.10	44.24
Northeast Airlines, Inc.	99,745	45.64	3,327	72.20	573,976	104.20	1,078,841	107.30	25.69	41.40
Pennsylvania-Central Airlines Corporation	479,566	1.15	8,606	4.43	3,256,736	1.65	28,645,384	17.06	39.98	33.54
Transcontinental & Western Air, Inc.	565,701	64.72	26,783	65.94	5,160,636	79.07	24,380,384	123.76	45.71	42.88
United Air Lines Transport Corporation	1,665,126	22.98	34,750	43.70	15,736,136	29.65	170,858,030	53.62	53.18	52.14
Western Air Lines, Inc.	2,329,652	19.35	41,967	30.66	20,188,851	33.93	294,965,810	42.60	57.74	51.69
Western Air Lines, Inc.	276,657	26.17	5,717	55.73	1,691,891	57.67	27,400,206	53.24	36.80	33.91
Total	11,500,667	20.13	301,878	37.34	106,617,851	31.02	934,640,844	38.63	53.26	50.09

Landing Facilities in 1941 Show Gain; 328 Airports, Seaplane Bases Added

There was an increase of 328 airports, landing fields, seaplane bases, and anchorages in the United States during 1941, according to figures compiled by the Civil Aeronautics Administration.

As of January 1, 1942, there were on record with the C. A. A. 2,484 airports and landing fields, compared with a total of 2,202 on January 1, 1941, a gain of 282. At the first of this year there were 362 seaplane bases and anchorages, as against 316 at the beginning of last year, a gain of 46. Thus, at the beginning of 1942 landing facilities of all kinds in the Nation totaled 2,846.

Of the total airports and landing fields in operation January 1, 1942, 1,086 were municipal, 930 commercial, 283 intermediate, 38 Navy, 77 Army, 40 miscel-

laneous government, and 30 private. Lighting facilities were provided by 662.

Seaplane bases and anchorages in operation January 1, 1942, were divided into the following categories: 59 bases, 267 anchorages, 21 Navy, 11 U. S. Coast Guard, 1 U. S. Marine Corps, and 3 Army; 21 had lighting facilities.

Texas led all the States in the number of airports and landing fields with a total of 207. California was next with 194, and Michigan third with 125. Last year California led with 174; Texas was next with 146; and Florida third, with 122.

Complete figures for all States and all classes of landing fields are given in the accompanying table.

Chapter XIX Revision Is Issued by C. A. A.

The Civil Aeronautics Administration has issued a revision of chapter XIX, Aircraft Engines, of the Inspection Handbook. Copies may be obtained from the Publications and Statistics Division, Civil Aeronautics Administration, Washington, D. C.

Along with the new chapter XIX, which is dated December 1, 1941, there was issued a numerical list of current aircraft, engine, propeller, appliance, product and process specifications, and revised pages of chapter XVIII of the Handbook.

Specifications for inactive engines are listed alphabetically by manufacturer and model in the new edition of chapter XIX, which supersedes the edition dated July 15, 1936, and all revisions and supplements thereto except as otherwise noted.

Status of Landing Facilities by States on January 1, 1942

State	Airports and Landing Fields									Seaplane Bases and Anchorages							
	Municipal	Commercial	Intermediate	Navy	Army	Miscellaneous, Government	Private	Total	Lighted	Base	Anchorage	Navy	U. S. Coast Guard	U. S. Marine Corps	Army	Total	Lights
Alabama	18	6	4		5			33	14		1					1	
Arizona	18	23	10		1	1	1	54	15								
Arkansas	12	15	3					30	7		1					1	
California	72	83	17	4	7	7	4	194	51	5		3	2			10	2
Colorado	26	7	4		1		1	39	8		2						
Connecticut	8	9	1					18	6	2	10		1			13	
Delaware	3	6						9	1								
District of Columbia	1			1	1			3	3			1				2	
Florida	77	12	7	10	5		1	112	29	9	26	4	2			41	3
Georgia	30	5	12	1	1			49	20	2						2	1
Idaho	24	6	6			7	1	44	12								
Illinois	16	60	6	1	2			85	18	1	6					7	
Indiana	13	36	6		1			56	15		2					2	
Iowa	22	23	3				1	49	10								
Kansas	27	13	4		2			46	11								
Kentucky	7	8	3		1			19	4	1						1	
Louisiana	16	8	4	2	4			34	13	2	9					11	1
Maine	14	1						15	5	3	20					23	1
Maryland	2	17			3		1	23	4	2	1	1				4	1
Massachusetts	10	26	1	1	2		1	41	4	3	36		1			40	
Michigan	87	23	1	1	4	4	5	125	18	1	28	1			1	31	
Minnesota	19	8	2		1			30	8	2	5		1			7	
Mississippi	23	4	7					34	14							3	1
Missouri	11	24	11	1				47	19				1				
Montana	40	2	15			13	1	71	21		1					1	
Nebraska	31	11	5		2			49	13								
Nevada	7	9	8					24	10		1					1	
New Hampshire	8	5						13	3	1	5					6	
New Jersey	7	25		3	1			36	6	3	2	1				6	3
New Mexico	19	16	13					48	18								
New York	29	63	6	1	4	1	1	106	22	10	38	1	1		1	51	2
North Carolina	19	24	2	1	1	1		48	10	1	6		1			8	
North Dakota	21	1	9					31	10								
Ohio	30	71	11		3		3	118	24		10					10	1
Oklahoma	28	26	7		1			60	17		2					2	
Oregon	21	6	6			1		34	14	2		1				3	1
Pennsylvania	35	68	5	1	1		1	111	26	2	6	1				9	1
Rhode Island	1	2						4	1		2	2				4	
South Carolina	14	10	4	1	1		2	32	10		4		1			5	1
South Dakota	15	5	1					21	4								
Tennessee	10	4	8					22	13								
Texas	77	79	10	1	14	1	4	207	51	1	10	1				12	1
Utah	13	4	10					27	15								
Vermont	8	3						12	1		3					3	
Virginia	17	29	8	4	1			59	16	3	10	2		1	1	5	
Washington	30	10	7	4	4	4		59	18	3	10	2	1			16	
West Virginia	10	11	2		1			24	3	2	1					3	
Wisconsin	21	22	3		1			47	11	1	17					18	
Wyoming	21	1	10				1	33	16								
Total	1,086	930	283	38	77	40	30	2,484	662	59	267	21	11	1	3	362	21

15 Airports to Finish Training Programs

Airport Servicemen's Training Programs will be completed at 15 airports during January, the United States Office of Education has announced. As of January 31, there will be a total of 113 completed programs. Following are the airports which will complete their programs this month:

King County Boeing Airport, Seattle, Wash.; Daugherty Municipal Field, Long Beach, Calif.; Rochester Municipal Airport, Rochester, N. Y.; Houston Municipal Airport, Houston, Tex.; Winston-Salem Municipal Airport, Winston-Salem, N. C.; Tuskegee Airport, Tuskegee Institute, Ala.; Los Angeles Metro-



politan Airport, Van Nuys, Calif.; San Francisco Municipal Airport, San Francisco, Calif.; Boston Municipal Airport, East Boston, Mass.; Theodore Francis Green Airport, Hills Grove, R. I.; Omaha Municipal Airport, Omaha, Nebr.; Peter O. Knight Airport, Tampa, Fla.; New Orleans Municipal Airport, New Orleans, La.; Barnes Airport, Westfield, Mass.; Fitchburg-Leominster, Leominster, Mass.

Airport Projects Approved

In accordance with the provisions of section 303 of the Civil Aeronautics Act, the Administrator of Civil Aeronautics has issued certificates of air navigation facility necessity, authorizing the expenditure of Federal funds in the operation of the following projects:

ALABAMA

Foley, Municipal Airport (CAA-WPA)----- \$109,983

CALIFORNIA

Palmdale, Palmdale Airport (WPA)----- 351,500

CONNECTICUT

Hartford, Brainerd Field (CAA-WPA)----- 128,064

DISTRICT OF COLUMBIA

Gravelly Point, Washington National Airport (PWA)----- 30,000

FLORIDA

Deland, Municipal Airport (CAA-WPA)----- 320,088
Sarasota, Sarasota-Manatee County Airport (CAA-WPA)----- 304,318

IDAHO

Pocatello, Municipal Airport (WPA)----- 8,961

MAINE

Pittsfield, Municipal Airport (WPA)----- 284,500

NEBRASKA

Columbus, Municipal Airport (WPA)----- 5,773
Omaha, Municipal Airport (WPA)----- 10,019
Omaha, Municipal Airport (WPA)----- 698,212

NEW HAMPSHIRE

Claremont, Municipal Airport (CAA-WPA)----- 65,897
Manchester, Municipal Airport (WPA)----- 174,862

Airports of Entry

On January 1, 1942, there were 55 airports and seaplane bases designated as airports of entry through which aircraft arriving in the United States, its Territories, or Insular possessions, may clear customs and immigration.

Airports of entry are designated by the Treasury Department after consultation with representatives of other interested Federal agencies and due consideration as to the necessity for such designation. Some are designated without time limit, while others are given temporary designation for the period of 1 year, as shown in the table below:

Without time limit

Location	Name	Location	Name
Akron, Ohio ¹	Municipal Airport.	Nogales, Ariz.	Nogales Municipal Airport.
Albany, N. Y.	Do.	Ogdensburg, N. Y.	Ogdensburg Seaplane Anchorage.
Brownsville, Tex.	Do.	Pembina, N. Dak.	Fort Pembina Airport.
Buffalo, N. Y.	Do.	Portal, N. Dak.	Portal Airport.
Caribou, Maine	Caribou Municipal Airport.	Port Townsend, Wash.	Port Townsend Airport.
Cleveland, Ohio	Cleveland Municipal Airport.	Put-in-Bay, Ohio	Put-in-Bay Airport.
Detroit, Mich.	Detroit Municipal Airport.	Rochester, N. Y.	Rochester Municipal Airport.
Do.	Ford Airport.		
Do.	Wayne County Airport.		
Douglas, Ariz.	Douglas Airport.	Rouses Point, N. Y.	Rouses Point Seaplane Base.
Duluth, Minn.	Duluth Municipal Airport.	San Diego, Calif.	San Diego Municipal Airport (Lindbergh Field).
Do.	Duluth Boat Club Seaplane Base.	San Juan, P. R.	Isla Grande Airport.
Eagle Pass, Tex.	Eagle Pass Airport.	Seattle, Wash.	Boeing Municipal Airport.
El Paso, Tex.	Municipal Airport.	Do.	Lake Union.
Fairbanks, Alaska	Weeks Municipal Airfield.	Skagway, Alaska	Skagway Municipal Airport.
Juneau, Alaska	Juneau Airport.	Swanton, Vt.	Missisquoi Airport.
Ketchikan, Alaska	Ketchikan Airport.	West Palm Beach, Fla.	Roosevelt Flying Service Base (Currie Common Park).
Laredo, Tex.	Laredo Airdrome.	Wrangell, Alaska	Wrangell Seaplane Base.
Miami, Fla.	Pan-American Field (or 36th St.).		
Do.	Dinner Key Seaplane Base.		

¹ Not an airport of entry for aliens.

Temporary (1 year)

Location	Name	Date designated
Alexandria Bay, N. Y.	(Thousand Islands Club Airport)	May 1, 1941
Bangor, Maine	(Alexandria Bay Seaplane Base)	June 26, 1941
Buffalo, N. Y.	Buffalo Municipal Airport	Oct. 16, 1941
Burlington, Vt.	Buffalo Launch Club Seaplane Anchorage.	June 29, 1941
Calxico, Calif.	Burlington Municipal Airport	Jan. 10, 1941
Cape Vincent, N. Y.	Calxico Municipal Airport	Apr. 25, 1941
Cut Bank, Mont.	Cape Vincent Harbor	Oct. 17, 1941
Fort Yukon, Alaska	Cut Bank Airport	July 6, 1941
Great Falls, Mont.	Fort Yukon Airfield	June 2, 1941
Havre, Mont.	Great Falls Municipal Airport	Do.
Malone, N. Y.	Havre Municipal Airport	Apr. 18, 1941
Miami, Fla.	Malone Airport	Sept. 17, 1941
Niagara Falls, N. Y.	Chalks Flying Service Airport	July 2, 1941
Ogdensburg, N. Y.	Niagara Falls Municipal Airport	Dec. 10, 1941
Sandusky, Ohio	Ogdensburg Airport	June 1, 1941
Sault Ste. Marie, Mich.	John G. Hinde Airport	Aug. 4, 1941
Spokane, Wash.	Sault Ste. Marie Airport	June 2, 1941
Warroad, Minn.	Spokane Municipal Airport (Felts Field)	Sept. 2, 1941
Watertown, N. Y.	Warroad Seaplane Base	June 2, 1941
	Walling-Watertown Airport	

Air Navigation Facilities

(January 1, 1942)

Radio Aids

Ranges (11 in Alaska, 2 in Hawaii)---	309
Range stations simultaneous, with voice (10 in Alaska, 2 in Hawaii)---	197
Range stations nonsimultaneous, with voice---	99
Range stations, no voice (1 in Alaska)---	13
Broadcast stations (11 in Alaska, 2 in Hawaii)---	122
Broadcast stations, simultaneous (10 in Alaska, 2 in Hawaii)---	119
Broadcast stations, nonsimultaneous (1 in Alaska)---	3
Marker stations---	35
Fan markers---	150
Voice (only) stations (5 in Alaska)---	18
Z-markers (not at range stations)---	3



SPAB Approval Speeds Aviation Gas Program

The far-reaching program of the Office of Petroleum Coordinator for National Defense to multiply America's capacity for producing 100-octane aviation gasoline has forged ahead rapidly on a number of fronts. The following developments are among the most significant:

An expansion plan recommended by Petroleum Coordinator Harold L. Ickes in a confidential memorandum has been approved by the Supply Priorities and Allocations Board.

Royalty reductions amounting to \$5,000,000 were granted by a group of companies which own patents on the complicated processes involved in manufacture of 100-octane aviation fuel.

A model contract for new plant construction was worked out by representatives of the Cities Service Co., the Defense Supplies Corporation, and the Petroleum Coordinator.

Steps were taken for the immediate construction of the world's largest gas cycling plant at the Katy Gas Field, Waller County, Tex.

Allocations Assured

The Coordinator's memorandum outlining expansion efforts included a comprehensive statement of the Nation's present capacity for producing the super fuel, its stocks on hand, the expected demand for the immediate future and for long-range needs, and the recommended methods by which the demand will be met.

SPAB's approval clears the way for putting the full plan into effect and will assure necessary allocations for obtaining supplies and equipment needed for the construction program.

Production of 100-octane gasoline in huge quantities is essential to the American armed forces and to our allies, since it gives aviation engines a "victory margin" in extra speed, extra power, and extra maneuverability.

Already the United States produces more of this super fuel than all the rest of the world combined, but the program which the Petroleum Coordinator and the oil industry are now expediting is necessary to treble the present output. Plant expansions costing up to \$150,000,000 are either already under construction or ready for a start in the immediate future.

Saving to Taxpayers

The royalty cuts, affecting all 100-octane gasoline furnished to or at the request of the United States Government, will save the American taxpayers more than \$5,000,000 annually on their war bill. By terms of the agreement, the royalties are immediately slashed by half; from 42 cents per barrel to 21 cents per barrel, effective until July 1, 1943. Thereafter, they will be further reduced to 15 cents per barrel.

The reductions were made possible through negotiations carried on by the Office of Petroleum Coordinator. Companies granting the reductions are the Texaco Development Corporation, Shell Development Co., Standard Oil Development Co., Anglo-Iranian Oil Co., Ltd., of England, and Universal Oil Products Co.

Model Contract

The contract with Cities Service Co. calls for an immediate start on a \$2,000,000 plant in the Middle West. It also clears the way for the completion of similar aviation gasoline contracts with other refiners. Under provisions of the contract, a loan will be advanced by the Government for part of the construction costs. The entire output will be purchased by the Government for at least 3 years.

Meanwhile, it was announced that the plant to be erected at the Katy field in Texas will process 274,000,000 cubic feet of gas daily—an amount which will yield nearly 7,500 barrels per day of combined distillate, kerosene, naphtha, natural gasoline, butane, and iso-butane.

More than \$3,000,000 will be invested in the project by Stanolind Oil & Gas Co., Humble Oil & Refining Co., and Humble Pipe Line Co. The plant will be operated by Humble Oil & Refining. A preference rating of A-1-a has been assigned to the project to insure swift construction.

The plant will extract the maximum economical amounts of iso-butaness and butanes, essential to the manufacture of 100-octane aviation gasoline. At the suggestion of OPC, the project was redesigned to recover 80 percent of available butanes instead of the 50 percent originally contemplated.

1941 Aircraft Output

Driving their production schedules to a new all-time record in response to the attack on the United States, American aircraft manufacturers have reported that they built more than \$1,500,000,000 worth of warplanes, engines, and propellers during 1941.

Bomber From Parts Made by Auto Firms Ahead of Schedule

The first Army bomber assembled from parts fabricated by the automobile industry soon will roll from the production line of a new \$11,000,000 plant at Kansas City, Mo., months ahead of schedule.

The plant, which will make the B-25 two-engine bomber, was built and partly equipped by the Government, and will be managed by North American. Special jigs and tools were supplied by the company, which has its main plant in Inglewood, Calif.

Under the Mid-western bomber assembly program, wing, tail, and other subassemblies will be fabricated in plants operated by automobile companies and assembled in other plants managed by aircraft companies.

Subassemblies for the Kansas City plant will be made in the Fisher Body plants at Detroit and Memphis. These parts will be shipped to Kansas City for final assembly. About 35 percent of the parts, however, will be made from raw materials in the plant there.

—Keep 'Em Flying—

New Type Approvals

(Approval numbers and dates of assignment in parentheses)

Type Certificates

Appliances

Jack Carr Service, skis, model 16. Approved static load per ski 800 pounds (146, December 3, 1941).

New Models Added to Old Type Approvals

(Approval numbers and dates of approval of new models in parentheses)

Aircraft

Aeronca, 65-TAC, 2-place closed land monoplane. Engine, Continental A-65-8 (type certificate No. 728, December 3, 1941).

Aeronca, 65-TAF, 2-place closed land monoplane. Engine, Franklin 4A-C-176-B2 (type certificate No. 728, December 3, 1941).

Propellers

Sensenich, 90HSP, wood, 7-foot-6-inch diameter, 7-foot-6-inch to 6-foot-10-inch pitch, 160 horsepower, 1,850 revolutions per minute (approved type certificate No. 586, December 4, 1941).

Sensenich, 90HASP, wood, 7-foot-6-inch diameter, 7-foot-6-inch to 6-foot-10-inch pitch, 160 horsepower, 1,850 revolutions per minute (approved type certificate No. 586, December 4, 1941).

Sensenich, 82R, wood, 6-foot-10-inch diameter, 6-foot-8-inch to 6-foot-5-inch pitch, 145 horsepower, 2,050 revolutions per minute (approved type certificate No. 538, December 12, 1941).

Appliances

Heath, skis, model 725. Approved static load per ski 725 pounds (type certificate No. 138, December 15, 1941).

CIVIL AERONAUTICS BOARD OFFICIAL ACTIONS

Abstracts of Opinions, Orders, and Regulations

FOR THE PERIOD DECEMBER 15-31, 1941

ORDERS

ORDER No. 1437-----December 16, 1941

Suspended for 30 days private pilot certificate No. 42370, held by John A. Thiele, Wyomissing, Pa., for failure to maintain a complete and accurate record of his flight time in his pilot log book, in violation of the Civil Air Regulations.

ORDER No. 1438-----December 16, 1941

Suspended for 90 days aircraft and aircraft engine mechanic certificate No. 17576, held by Earle C. Jones, Bridgeton, Mo., for certifying an aircraft as airworthy when it was, in fact, unairworthy.

ORDER No. 1439-----December 16, 1941

Revoked student pilot certificate No. S-308906, held by Carl Doby, Albemarle, N. C., for piloting an aircraft in solo flight when he had not been certified as competent to engage in such operation, and other violations of the Civil Air Regulations.

ORDER No. 1440-----December 16, 1941

Denied the petition of Mid-Continent Airlines, Inc., for reconsideration of order, Serial No. 1406, denying its petition for consolidation of its application for a certificate of public convenience and necessity with the applications of National Airlines, Inc., Delta Air Corporation, Braniff Airways, Inc., Eastern Air Lines, Inc., and Chicago & Southern Air Lines, Inc.

ORDER No. 1441-----December 16, 1941

Approved an agreement (contract C. A. B. No. 192) between Continental Airlines, Inc., and United Air Lines Transport Corporation relating to the joint use of certain premises and facilities of the Denver Municipal Airport, Denver, Colo.

ORDER No. 1442-----December 16, 1941

Approved interlocking relationships contained in the applications of J. Morrell Foster, Oliver L. Parks, and Mid-Continent Airlines, Inc.

ORDER No. 1443-----December 16, 1941

Amended Order Serial No. 1434 temporarily exempting Pan American Airways, Inc., from the provisions of section 401 (a) of the Civil Aeronautics

Act so as to authorize service to and from Camaguey, Cuba, as an intermediate point between Miami, Fla., and San Juan, P. R., and between Miami and Cristobal, C. Z.

ORDER No. 1444-----December 16, 1941

Revoked private pilot certificate No. 42201, held by George Hain Gardner III for piloting an uncertificated aircraft on a civil airway, and other violations of the Civil Air Regulations (opinion and order).

ORDER No. 1445-----December 17, 1941

Consolidated for the purpose of hearing the application of American Airlines, Inc., for a certificate of public convenience and necessity and the petitions of Laredo, Eagle Pass and San Antonio, Tex., with the application of American Airlines, Inc., for approval of the acquisition or control of American Airlines de Mexico, South America.

ORDER No. 1446-----December 17, 1941

Granted United Air Lines Transport Corporation permission to inaugurate nonstop service between Salt Lake City, Utah, and Sacramento, Calif., points on route No. 1, on December 15.

ORDER No. 1447-----December 17, 1941

Granted Eastern Air Lines, Inc., permission to inaugurate service to Mobile, Ala., through the use of the Mobile Municipal Airport, on December 15.

ORDER No. 1448-----December 18, 1941

Denied the application of National Airlines, Inc., for an order authorizing it temporarily to suspend service at Daytona Beach, Fla., on route No. 31.

ORDER No. 1449-----December 19, 1941

Suspended for 30 days student pilot certificate No. 308912, held by Charles Whipple, Charlotte, N. C., for piloting an aircraft in solo flight outside the operating base of his instructor when he had not been certified as competent for such operation in violation of the Civil Air Regulations.

ORDER No. 1450-----December 19, 1941

Suspended for 30 days student pilot certificate No. S-226920, held by Bernard W. Petrosuis, Glendale, W. Va., for starting the engine of an aircraft without a competent operator at the con-

trols, and other violations of the Civil Air Regulations.

ORDER No. 1451-----December 19, 1941

Suspended for 45 days private pilot certificate No. 21484-40, held by Emile J. Piel, Fort Lee, N. J., for piloting an aircraft within an air-space reservation in the city of Washington, D. C.

ORDER No. 1452-----December 19, 1941

Approved an agreement (contract C. A. B. No. 209) between Mid-Continent Airlines, Inc., and United Air Lines Transport Corporation relating to the use of Mid-Continent personnel for the maintenance of United planes at Omaha, Nebr., and Des Moines, Iowa.

ORDER No. 1453-----December 19, 1941

Approved an agreement (contract C. A. B. No. 210) between United Air Lines Transport Corporation and Mid-Continent Airlines, Inc., relating to the use of United personnel for the maintenance of Mid-Continent planes at Omaha, Nebr., and Des Moines, Iowa.

ORDER No. 1454-----December 19, 1941

Denied the motion of Braniff Airways, Inc., and Pan American Airways, Inc., for dismissal of the amended application of American Airlines, Inc., for a certificate of convenience and necessity, for approval of the acquisition or control of American Airlines de Mexico, South America, and the petitions of Laredo, Eagle Pass, and San Antonio, Tex.

ORDER No. 1455-----December 19, 1941

Postponed until June 30, 1942, the effective date of the previous order of the Board (serial No. 1257), which denied the issuance of a foreign air carrier permit to Canadian Colonial Airways, Ltd.

ORDER No. 1456-----December 23, 1941

Suspended for 30 days student pilot certificate No. S-177152, held by Vyron G. Harmon, Little Rock, Ark., for piloting an aircraft at an altitude of less than 1,000 feet over an open air assembly of persons and other violations of the Civil Air Regulations.

ORDER No. 1457-----December 23, 1941

Revoked student pilot certificate No. S-255464, held by Gary A. Stone, San Diego, Calif., for piloting an aircraft carrying a passenger other than a certificated instructor and other violations of the Civil Air Regulations.

ORDER No. 1458.....December 23, 1941

Revoked air-traffic control-tower operator certificate No. 97486-41, held by Edward F. Rehels, for failing to accomplish satisfactorily an examination prescribed for the holders of air-traffic Control-Tower operator certificates.

ORDER No. 1450.....December 23, 1941

Revoked student pilot certificate No. S-255860, held by Frank Elverton Squire for piloting an aircraft carrying a passenger other than a certificated instructor and other violations of the Civil Air Regulations.

ORDER No. 1460.....December 23, 1941

Reopened proceeding in the matter of United Air Lines Transport Corporation so as to modify the previous order of the Board (serial No. 563) which determined the fair and reasonable rates of compensation for the transportation of mail over routes Nos. 1, 11, 12, and 17.

ORDER No. 1461.....December 23, 1941

Amended Order Serial No. 706, as amended, so as to authorize the extension of the period of temporary suspension of service by Eastern Air Lines, Inc., at Spartanburg, S. C., on route No. 5, until such time as the airport is determined to be available for Eastern aircraft.

ORDER No. 1462.....December 24, 1941

Instituted a proceeding to determine whether the public convenience and necessity requires temporary air transportation to and from Huntsville, Ala.; made Eastern Air Lines, Inc., and Pennsylvania-Central Airlines Corporation parties to such a proceeding and consolidated it with the application of Eastern Air Lines, Inc., for an amendment of its certificate for route No. 40.

ORDER No. 1463.....December 26, 1941

Suspended for 60 days student pilot certificate No. S-320636, held by Homer H. Beckley, Jr., San Diego, Calif., for piloting an aircraft carrying a passenger other than a certificated instructor in violation of the Civil Air Regulations.

ORDER No. 1464.....December 26, 1941

Revoked private pilot certificate No. 42883-40 held by Calvert L. Evins, for piloting an aircraft at an altitude of less than 1,500 feet and other violations of the Civil Air Regulations.

ORDER No. 1465.....December 30, 1941

Authorized Eastern Air Lines, Inc., to inaugurate nonstop service between Chicago, Ill., and Atlanta, Ga., on Route No. 10 (Opinion and order—Docket No. 665).

C. A. B. Opinions

Six more of the individually printed opinions of the Civil Aeronautics Board in economic cases are now available. Copies of these advance sheets may be obtained from the Superintendent of Documents, Government Printing Office, Washington, D. C. The price is 5 cents per copy, except Nos. 45 and 50, which are 10 cents each.

The opinions just printed include the following:

No. 36—Docket No. 19-401 (E)-1, RAILWAY EXPRESS AGENCY, INC.—CERTIFICATE OF PUBLIC CONVENIENCE AND NECESSITY.

No. 37—Docket No. 269, UNITED AIR LINES TRANSPORT CORPORATION, *Et Al.*—CERTIFICATE OF PUBLIC CONVENIENCE AND NECESSITY.

No. 44—Docket No. 308, TRANS-CANADA AIR LINES—PERMIT TO FOREIGN AIR CARRIER (Toronto - Buffalo - New York Route).

No. 45—Docket No. 327, *Et Al.*, NORTHWEST AIRLINES, INC. *Et Al.*—CERTIFICATE OF PUBLIC CONVENIENCE AND NECESSITY (Additional Service to Canada).

No. 50—Docket No. 332, CONTINENTAL AIR LINES, INC.—MAIL RATES FOR ROUTES Nos. 29 and 43.

No. 60—Docket No. 71-401-E-1 *Et Al.*, ALASKA AIR TRANSPORTATION INVESTIGATION.

When ordering these publications, include opinion serial number and docket number, as well as opinion title.

REGULATIONS

The Civil Aeronautics Board has issued a corrected copy of Amendment 60-43, which was printed in the December 15 issue of the Civil Aeronautics Journal. In the corrected version section 60.35 is titled "Minimum and maximum safe altitudes of flight" instead of "Minimum safe altitudes," and section 60.48 is deleted.

AMENDMENT 66.0.....December 9, 1941

Effective January 15, 1942:

PART 66—FOREIGN AIR CARRIER REGULATIONS

- 66.1 Scope.
- 66.2 Application of the air traffic rules.
- 66.3 Requirement of pilot certificate.
- 66.4 Provision for demonstration of ability.
- 66.5 Requirement of aircraft airworthiness.
- 66.6 Inspection.
- 66.7 Control of traffic at terminal airports.
- 66.8 Requirement of operation specifications.
- 66.9 Operation in accordance with operation specifications.

66.1 Scope.—The following regulations shall apply to scheduled operations within the United States (not including the Philippines) by aircraft of a foreign air carrier holding a permit issued by the Board, pursuant to the provisions of section 402 of the Civil Aeronautics Act of 1938.

66.2 Application of the air traffic rules.—Such operation shall be conducted in accordance with the provisions of the air traffic rules prescribed in Part 60 of the Civil Air Regulations except to the extent otherwise provided in these regulations. Any pilot employed in such operation may be required to accomplish a satisfactory examination demonstrating his knowledge of such rules.

66.3 Requirement of pilot certificate.—Each member of the crew of such aircraft shall be possessed of a proper currently effective certificate issued by the country whose nationality the aircraft possesses evidencing his competency to perform his duties in connection with the operation of such aircraft, or of a comparable certificate issued by the United States.

66.4 Provision for demonstration of ability.—In the interest of avoiding collisions between foreign air carrier aircraft and other aircraft, any member of the crew of such foreign air carrier aircraft may be required satisfactorily to demonstrate his ability to serve in such operation. Such demonstration may include, but need not be limited to, the use of the radio range, and the direction finder in the navigation of aircraft, and the operation of aircraft in instrument flight and during instrument approach for landing.

66.5 Requirement of aircraft airworthiness.—A foreign air carrier aircraft shall be possessed of a currently effective certificate of airworthiness issued by the country whose nationality it possesses, and shall have such combination of radio equipment providing radio range reception, direction finding, two-way voice communication, two-way CW communication, and of such character and quality, as shall be considered necessary by the Administrator to use air navigation facilities along and adjacent to the route to be flown within the United States and to maintain communication with ground stations along and adjacent to such route.

66.6 Inspection.—A foreign air carrier aircraft shall be subject to inspection by a duly authorized representative of the Administrator to determine that the aircraft has the equipment provided for in section 66.5.

66.7 Control of traffic at terminal airports.—No aircraft shall be operated by a foreign air carrier within the United States unless adequate personnel and equipment are provided for two-way radio voice communication between the aircraft and ground stations at such times and places as communication is deemed necessary by the Administrator. If such communication cannot be maintained in the English language or in a language with which the ground station operator is familiar, there shall be provided to assist the regular ground station operator during such times as communication with the aircraft is necessary, a person who is able to read, write, understand, and speak fluently the English language and the language necessary to maintain adequate two-way communication with the aircraft. In the case of an air-traffic control-tower ground station such person shall be a qualified air-traffic control-tower operator and shall be in such tower during such times as communication with the aircraft is necessary.

66.8 Requirement of operation specifications.—No foreign air carrier shall operate an aircraft in scheduled service within the United States unless the Administrator shall, after investigation and upon determination that such aircraft is properly and adequately equipped and able to conduct a safe operation with respect to other aircraft, have issued to such carrier operation specifications prescribing the conditions under which such operation shall be conducted. Such specifications shall prescribe the type of operation (visual contact or instrument, day or night), the points to and from which and the civil airways over which such operation is to be conducted, the minimum limits of ceiling and visibility to be observed, the points of take-off and landing, and such other restrictions as may be reasonably required in the interest of avoiding collisions between the foreign air carrier aircraft and other aircraft.

66.9 Operation in accordance with operation specifications.—No foreign air carrier shall operate aircraft in scheduled service within the limits of the United States other than in accordance with operation specifications issued by the Administrator.

REGULATION 198.....December 16, 1941

Effective Dec. 16, 1941:

Notwithstanding the provisions of Parts 40 and 61 of the Civil Air Regulations, the operations of Catalina Air Transport between Santa Catalina Island and Los Angeles, Calif., may be conducted in accordance with such terms, conditions, and limitations as are set forth in the air carrier operating certificate and operation specifications made a part thereof issued by the Administrator of Civil Aeronautics with respect to such service.

CIVIL AERONAUTICS JOURNAL

REGULATION 199.....December 19, 1941

Effective Dec. 19, 1941:

Notwithstanding any provisions of the Civil Air Regulations to the contrary, any first pilot listed in Eastern Air Lines' airman competency letter at the time said air carrier is authorized to commence operations at the Mobile Municipal Airport, as qualified to operate an aircraft in scheduled air transportation over a route for which Brookley Field presently serves as a terminal or intermediate stop, may operate aircraft into and out of the Mobile Municipal Airport in such air transportation upon furnishing to Eastern Air Lines and to the Chief, Air Carrier Branch of the Civil Aeronautics Administration of the Second Region, Municipal Airport, Atlanta, Ga., a satisfactory sketch of the Municipal Airport and a written inspection report describing its condition, construction, and surrounding terrain. Such sketch and report shall be preserved by Eastern Air Lines as specified in section 40.2611 (b) of the Civil Air Regulations for written reports and sketches of intermediate fields.

AMENDMENT 27-4.....December 19, 1941

Effective January 1, 1942:

27.23 *Periodic endorsement requirements.*—No aircraft dispatcher certificate shall receive a periodic endorsement unless the holder thereof shall make application for endorsement upon the applicable form prescribed and furnished by the Administrator and shall show that for 6 months of the preceding 12-month period he has (1) served as an aircraft dispatcher, or (2) served as first or second pilot in scheduled air carrier operation, or (3) has been engaged in the actual supervision of, or has been responsible for determining or certifying the competency or qualifications of, aircraft dispatchers or air carrier dispatching systems.

AMENDMENT 20-24.....December 23, 1941

Effective January 1, 1942.

20.197 *Aeronautical skill.*—No requirement is prescribed.

AMENDMENT 20-25.....December 23, 1941

Effective January 1, 1942.

20.186 *Aeronautical experience.*—Applicant shall have logged at least 35 hours of solo flight time: *Provided*, That an applicant seeking a rating limited to two-control nonspinnable airplanes with nose-wheel type landing gear shall have logged at least 25 hours of solo flight time. As part of the foregoing, applicant shall have logged at least 5 hours within the 60 days immediately preceding the date of filing the application, and at least 5 hours of cross-country flying of which at least 3 hours shall be solo, which shall include at least one flight over a course of not less than 50 miles with at least two full-stop landings at different points along the course. Such experience shall be certified to by some person, other than the applicant, having direct knowledge thereof. A graduate of the private pilot course of a certificated flying school will be deemed to have met the above requirements upon presentation of his certificate of graduation within 30 days thereof.

AMENDMENT 20-26.....December 23, 1941

Effective January 1, 1942.

20.300 *Aircraft rating.*—The aircraft which the applicant is deemed eligible to pilot will be prescribed on his Airman Rating Record or certificate by type and, in the case of an airplane, by airplane class and horsepower and, in the case of unconventional airplanes such description as is appropriate to define clearly the competence of the applicant. Competence to pilot aircraft in solo flight shall be demonstrated in aircraft of the type and, in the case of an airplane, the airplane class and horsepower range for which rating is sought. A pilot other than a student pilot, limited by his certificate or Airman Rating Record to two-control nonspinnable airplanes with nose-wheel type landing gear shall have logged a minimum of 35 hours of solo flight time of which at least 10 hours shall have been in three-con-

trol airplanes of traditional type and he shall demonstrate his ability to pilot competently such airplanes before such limitation may be removed. A person holding a currently effective pilot certificate on August 1, 1941, may be rated without further test to fly (a) aircraft of a type in which he has logged the solo hours specified for periodic endorsement for his grade of certificate, and (b) airplanes of a class and a horsepower range determined on the basis of the class and specific horsepower of airplanes in which he has logged at least 5 hours of solo flight time within the endorsement period and for which he holds a currently effective weight and engine classification rating.*

*NOTE.—For example, a pilot who is rated to fly class 28 land airplanes and who has logged at least 5 hours in one or more such airplanes of 220 horsepower may be rated to fly single-engine land airplanes of from 50 percent less, or 110 horsepower, to 50 percent greater, or 330 horsepower.

AMENDMENT 20-27.....December 23, 1941

Effective January 1, 1942.

20.56 (b) No student pilot shall be certified for cross-country solo flight until after he shall have logged 8 hours solo flight time and his instructor shall have certified on his student pilot certificate, in the space provided therefor, that he deems the student competent to make such flight. No student pilot certified for cross-country solo flights shall make a solo flight outside of the area, within a 50-mile radius of the operating base of his instructor, prescribed in writing by the person directly in charge of the landing area on which the instructor's operating base is located and approved by the local inspector of the Administrator: *Provided*, That a certificated flying school may prescribe in writing an area within a 100-mile radius of its operating base and, upon approval of said area by the local inspector of the Administrator, a student pilot enrolled in the flight curriculum of said school and certified for cross-country solo flights may fly solo within such area at the direction of said flying school.

AMENDMENT 20-28.....December 23, 1941

Effective January 1, 1942.

20.60 (c) The holder of a valid private, limited commercial, or commercial pilot certificate limited by his Airman Rating Record to the operation of aircraft incapable of spinning may pilot spinnable aircraft in accordance with subsection (b) of this section only after receiving dual instruction in spins.

(d) The holder of a valid private, limited commercial, or commercial pilot certificate limited by his Airman Rating Record to the operation of two-control nonspinnable airplanes with nose-wheel type landing gear may pilot three-control airplanes of any class or horsepower in accordance with subsection (b) of this section only after receiving 4 hours of dual instruction in three-control airplanes.

AMENDMENT 20-29.....December 23, 1941

Effective January 1, 1942.

Note 13 to section 20.60.

13 This section does not permit a person who by reason of section 20.104 (e) or section 20.127 (f) has been limited to the operation of a particular make or model of aircraft or a general type of aircraft to operate other makes or models or other general types.

AMENDMENT 20-30.....December 23, 1941

Effective January 1, 1942.

20.6100 *Requirement for first solo.*

(a) *Three control airplanes of traditional type.*—No first solo flight shall be made by a student pilot in a three-control airplane of traditional type until he shall have had a minimum of 8 hours of dual instruction in such aircraft, including recovery from spins and stalls.

(b) *Nonspinnable three-control airplanes.*—No first solo flight shall be made by a student pilot in a nonspinnable three-control airplane until he shall have had a minimum of 8 hours of dual instruction in three-control airplanes. Instruction in spins is not required.

(c) *Two-control nonspinnable airplanes with nose-wheel type landing gear.*—No first solo flight shall be made by a student pilot

in a two-control nonspinnable airplane with nose-wheel type landing gear until he shall have had a minimum of 5 hours of dual instruction in such airplanes.

In addition to meeting the requirements contained in (a), (b), or (c) above a student pilot shall not make a first solo flight unless his instructor deems him competent to make such flight and so certifies on the student pilot certificate in the space provided therefor.

20.6101 *Solo flight restrictions after first solo.*—Upon completion of a student pilot's first solo flight his instructor shall make a notation to that effect on the student pilot certificate together with a statement of the date, the type, and in the case of an airplane, the airplane class and horsepower range of the aircraft so flown. If such solo flight is made either in a two-control nonspinnable airplane with nose-wheel type landing gear or in a three-control airplane determined to be characteristically incapable of spinning, the instructor shall also make an appropriate notation to that effect. Thereafter—

(a) If such first solo flight was made in a three-control airplane of traditional type the student shall not solo aircraft of a different type, class, or horsepower range until such time as his instructor shall deem him competent to fly such other aircraft solo, and shall have made a notation to that effect on his certificate, together with the date, type, and in the case of an airplane, the class and horsepower range.

(b) If such first solo flight was made in a three-control airplane determined to be characteristically incapable of spinning, such pilot shall be subject to the limitations of paragraph (a) above, and in addition he shall not solo an airplane characteristically capable of spinning until after he shall have received dual instruction in spins, and a notation to that effect has been made on his Airman Rating Record.

(c) If such first solo flight was made in a two-control nonspinnable airplane with nose-wheel type landing gear such pilot shall be subject to the limitations of paragraphs (a) and (b) above, and in addition, prior to flying solo a three-control airplane, shall have received a minimum of 4 hours of dual instruction in such airplanes.

AMENDMENT 20-31.....December 27, 1941

Effective December 27, 1941.

20.68 (d) Notwithstanding provisions of (a), (b), and (c) of this section, a member of the armed forces of the United States may operate single-place aircraft in simulated instrument flight: *Provided*, Such flights shall be made only during the hours of daylight, in accordance with contact flight rules, and provided further, each such aircraft is accompanied by and under the continuous control by radio of a competent observer in an escort aircraft.

AMENDMENT 50-3.....December 23, 1941

Effective January 1, 1942.

50.20 *Private pilot flight curriculum* shall be satisfactory to the Administrator and shall consist of not less than 35 hours of flying time: *Provided*, That if the curriculum provides for training in only two-control nonspinnable airplanes with nose-wheel type landing gear it shall consist of not less than 25 hours of flying time.

New Plant to Produce Self-Sealing Fuel Tanks

To speed the production of bullet-sealing fuel and oil tanks for airplanes, a high priority rating covering the construction and equipping of a plant in Los Angeles has been given the United States Rubber Co.

It is expected that the plant will be completed before the end of spring. Self-sealing tanks are part of the equipment of military aircraft, and the company has orders to produce a large number of them. The special tanks are far superior to the old type metal containers which leaked when pierced by bullets.



Icing Conditions Create Hazard at Lower Levels

A recent safety bulletin issued by the Civil Aeronautics Board warns pilots to be on guard against icing conditions which often exist in the lower levels of atmosphere. The information in the bulletin is based on a meteorological study and explains under what conditions severe icing may be suspected in the lower cloud layers. Text of the bulletin follows:

Beware of Ice Accretion Within the Convective Layer!

Icing conditions are often present in the convective layer, or 1,000-3,000-foot levels.

In a recent technical note, J. A. Browne, meteorologist in charge of TWA's New York office, has made known results of a study of ice formations in the lower levels of the atmosphere, as follows:

"In a review of reports of ice accretion on the Pittsburgh-Kansas City airways during the winter of 1940-41, the majority of moderate or severe icing conditions were found to have been encountered within the surface convective layer. Furthermore, a surprisingly large number of cases were reported where icing of moderate to severe intensity was found within the first one or two thousand feet above the ground."

Under what conditions may severe icing be suspected in the lower cloud layers?

"First: Passage of a secondary cold front (or occlusion) near the center of an occluded low with freezing temperatures at the colder side.

"Second: A moderate wind and little spread between temperature and dewpoint.

"While no hard and fast rule can replace good judgment in the anticipation of icing conditions, the following broad observations might be used as a basis for determining the time when the intensity of icing conditions decrease:

"When precipitation changes to dry snow.

"When the surface temperature falls to 5° or more below freezing.

"When the temperature dewpoint spread becomes 5° or more."

The Winter Season Is Here—Beware of Ice—It May Be Present Close to the Ground

INDIVIDUAL ACCIDENT REPORTS

Wires Cause Accident

Warren J. Parks was seriously injured in an accident at the Gilpin Airport, Tucson, Ariz., on April 1, 1941. He held a private pilot certificate with a class 1 Land rating and had logged approximately 220 flying hours. His passenger, Buckingham Hall, was uninjured. The airplane, a Taylorcraft (Model BC-65), was extensively damaged.

Parks was engaged in a cross-country flight from the Army Airport at Tucson to the new Gilpin Airport. He approached the airport from the south, nearly into a northwest wind of 7 miles per hour. During its approach the aircraft struck telephone wires bordering the field. The landing gear became entangled in these wires, and the aircraft nosed into the ground.

It was subsequently disclosed that, although the pilot was familiar with the subject airport, he had never flown from it. The telephone wires had been installed on the day before the accident, and were higher than the wires which they replaced.

Probable cause.—Failure of pilot to avoid an obstruction during a landing approach.

Latin American

(Continued from page 17)

Two-thirds of the pilot trainees will receive instruction at 11 commercial flying schools supervised by the C. A. A., while the remainder will go to Randolph Field for the regular Army Air Corps course, with the exception of military subjects.

The Casey Jones School of Aeronautics, Newark, N. J., will train the engineers and some of the mechanics. Also participating in the mechanic training will be the Curtiss-Wright Technical Institute of Glendale, Calif., and the Embury-Riddle School of Aeronautics at Miami, Fla.

The scholarship winners range in age from 21 to 35, and have a working knowledge of English. They were chosen on the basis of education, experience, physical condition, mechanical aptitude, character and interest, by boards composed of notable civil and military aviation figures in each of the 20 Latin American Republics.

Some of the outstanding Latin American board members are Lt. Col. Ernesto Buenaventura, Director General of Military Aviation in Colombia; Capt. Guillermo Rivas Cuadra, head of the Nicaragua Air Force; Senor Luis Nardin

Rivas, Mayor of La Paz, Bolivia; Maj. Juan Ramon Munoz, Chief of Air Corps, El Salvador; Lt. Col. Oscar D. Gestido, Chief of Military Aviation, Uruguay; Capt. Juan Paz Mor, of the Paraguayan Air Force; Col. Luis Valenzuela, Director of Aviation, Costa Rica; Comodoro Carlos Puga, Subsecretary of the Office of Aviation, Ministry of National Defense, Chile; Lt. Col. Luiz Neto dos Reis, representing the Minister of Air, Brazil; General Fernando Melgar, of Peru; Capt. Mario Lovaton, Chief of the Dominican Air Force, and Senor Pedro Perez Dupuy, President, Venezuela Wing, Inter-American Escadrille.

U. S. Representatives

Among United States representatives on the selection boards were Major June, Naval Attaché, American Legation, Guatemala; John T. Shannon, Operations Manager, Pan American-Grace Airways, Peru; Lt. Comdr. Fitzhugh Lee, Naval Attaché, Venezuela; Maj. Charles Sommers, C. A. A. Inspector, Panama; Lt. Col. Thomas A. Austin, Military Attaché, Honduras, and Maj. Hayne D. Boyden, Naval Attaché for Air, Cuba.

Pilot trainees will take approximately 200 hours of flight instruction, over a period of 25 to 30 weeks, which will qualify graduates as commercial pilots or flight instructors. The administrative engineer scholarships, designed to produce men who can supervise operations, maintenance and repair of aircraft used in scheduled air transportation, general commercial flying, and in aviation schools, provide a 2-year course of about 2,750 hours. Over a period of 20 months, instructor mechanics will get 2,300 hours of training, while the airplane service mechanic course runs 6 months with a total of about 880 instruction hours.

Subject to emergency conditions, the following C. A. A. pilot training advance centers have been designated to give pilot training under the Inter-American Aviation Training Program:

Southwest Airways, Inc., Phoenix, Ariz.; Pacific Air School, San Jose, Calif.; Henson Flying Service, Inc., Hagerstown, Md.; North Aviation Co., White Bear Lake, Minn.; Tri-Cities Aviation School, Inc., Endicott, N. Y.; Calkins Aircraft Co., Spokane, Wash.; Parkersburg Flying Service & Aviation School, Parkersburg, W. Va.; Roscoe Turner Aero. Corp., Indianapolis, Ind.; Piedmont Aviation, Inc., Winston-Salem, N. C.; Olympia Air Transport, Olympia, Wash.; Plains Airways, Inc., Cheyenne, Wyo.

Agencies sponsoring the program and their representatives on the interdepartmental committee in charge are William Barclay Harding, vice president, Defense Supplies Corporation, also representing the Coordinator of Inter-American Affairs; Thomas E. Burke, Chief, International Communications Division, State Department; Maj. Eugene E. Gillespie, Air Corps, War Department, also representing Navy Department; G. Grant Mason, Member, Civil Aeronautics Board; and Brig. Gen. Donald H. Connolly, Administrator of Civil Aeronautics.

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